Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A packet transfer equipment that transfers the a received packet to another node characterized by that, comprising:

the packet transfer equipment specifies several types of means for extracting information contained in said received packet,

means for inquiring inquires of an external server about one or more type of information related to the a transfer method of said received packet, using the extracted information as a key, and

means for resolving resolves the transfer method of said received packet according to the one or more type of information obtained from said external server, and

means for transferring said received packet to said another node, based on the transfer method resolved by said resolving means,

said another node being a node of a user that is to receive and act on said received packet, or a node in a downstream direction towards said node of the user.

2. (Currently Amended) A packet transfer equipment that transfers the received packet to another node characterized by that comprising:

the packet transfer equipment specifies one or more type of means for extracting information in said received packet that is determined for each of said received packet,

means for inquiring inquires of an external server about one or more type of information related to the a transfer method of said received packet, using the extracted information as a key, and

means for resolving resolves the transfer method of said received packet according to the one or more type of information obtained from said external server, and

means for transferring said received packet to said another node, based on the transfer method resolved by said resolving means,

said another node being a node of a user that is to receive and act on said received packet, or a node in a downstream direction towards said node of the user.

3. (Canceled).

- 4. (Canceled).
- 5. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 1 wherein:

the information transfer method resolved by said external server as the information related to the packet transfer method contains at least one each of the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and the information related to the resource control method for the route through which the received packet is transferred.

6. (Currently Amended) A packet transfer equipment that transfers the <u>a</u> received packet to another node, comprising:

a packet information extraction section that extracts several types of information contained in said received packet, and

a packet transfer method resolution section that specifies said several types of information extracted by said packet information extraction section and inquires of an external server about one or more type of information related to the <u>a</u> transfer method of said received packet, and resolves the transfer method of said received packet according to one or more type of information obtained;

a packet transfer method storage table that temporarily stores the information related to the packet transfer method resolved by said packet transfer method resolution section.

wherein said packet transfer method resolution section checks whether said packet transfer method storage table stores any information related to the transfer method of said received packet before inquiring of an external server about information related to the transfer method of said received packet and, if said packet transfer method storage table stores the information related to the transfer method of said received packet, reads out the information related to the transfer method of said received packet transfer method storage table and thereby resolves the transfer method of said received packet,

wherein said received packet is transferred to the another node in accordance with the resolved transfer method.

7. - 9. (Canceled).

10. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

the information transfer method resolved by said external server as the information related to the packet transfer method contains at least one each of the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and the information related to the resource control method for the route through which the received packet is transferred.

11. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet information extraction section extracts the information encoded over two or more packets.

- 12. (Canceled).
- 13. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section uses the information contained in said received packet extracted by said packet information extraction section to create the an FQDN and/or the an IP address uniquely indicating the information contained in said received packet.

14. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section uniquely recognizes the transfer method of said received packet based on the an FQDN or the an IP address resolved with the domain name system server.

15. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section resolves the FQDN or the IP address uniquely indicating the packet transfer method corresponding to the information contained in said received packet extracted by said packet information extraction section by repeating the request for resolution of the FQDN or the IP address one or more times to the domain name system server.

16. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 wherein:

said packet transfer method resolution section uses the information contained in said received packet extracted by said packet information extraction section to create the an FQDN uniquely indicating the information contained in said received packet, inquires of the domain name system server, using said FQDN as the key, about the an IP address corresponding to said FQDN, inquires of said domain name system server, using the IP address corresponding to said FQDN replied by said domain name system server as the a key, about the FQDN corresponding to said IP address and uniquely recognizes the transfer method of said received packet based on the FQDN corresponding to said IP address replied provided from said domain name system server.

17. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 further comprising:

a service input section to set the a type of the service to be rendered; and

an extracted packet information conversion section to make eonversion conversions to the type of information contained in said received packet extracted by said packet information extraction section corresponding to said type of service set to said service input section.

18. (Currently Amended) [[A]] The packet transfer equipment as set forth in claim 6 further comprising:

a resource control request section that, if the resource control for other nodes in the network is required as additional information of the packet transfer method resolved by said packet transfer method resolution section, makes a request for the resource control of said other nodes.

19.-23. (Canceled).

24. (Currently Amended) A packet transfer method resolution server comprising: a packet transfer method database where the correspondences between several types of information contained in the <u>a</u> packet and one or more type of information related to the <u>a</u> packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts the <u>a</u> packet transfer method resolution request from the <u>a</u> packet transfer equipment that transfers the <u>a</u> received packet to another node inquiring the information related to the <u>a</u> transfer method of said received packet and specifying several types of information contained in said received packet, refers to said packet transfer method database, and replies <u>provides the</u> one or more type of information related to the transfer method of said received packet to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

25. (Currently Amended) A packet transfer method resolution server comprising: a packet transfer method database where the correspondences between one or more type of information contained in the a packet and one or more type of information related to the a packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts the <u>a</u> packet transfer method resolution request from the <u>a</u> packet transfer equipment that transfers the <u>a</u> received packet to another node inquiring the information related to the <u>a</u> transfer method of said received packet and specifying one or more type of information contained in said received packet that is determined for each of said received packet, refers to said packet

transfer method database and replies provides, to said packet transfer equipment, the one or more type of information related to the transfer method of said received packet,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

26. (Currently Amended) A packet transfer method resolution server comprising: a packet transfer method database where the correspondences between one or more type of information contained in the <u>a</u> packet and several types of information related to the <u>a</u> packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts the a packet transfer method resolution request from the a packet transfer equipment that transfers the a received packet to another node inquiring the information related to the a transfer method of said received packet and specifying one or more type of information contained in said received packet, refers to said packet transfer method database and replies provides, to said packet transfer equipment, several types of information related to the transfer method of said received packet.

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

27. (Currently Amended) A packet transfer method resolution server comprising: a packet transfer method database where the correspondences between one or more type of information contained in the <u>a</u> packet and one or more type of information related to the <u>a</u> packet transfer method are registered, and

a packet transfer method resolution request acceptance section that accepts the a packet transfer method resolution request from the a packet transfer equipment that transfers the a received packet to another node inquiring the information related to the a transfer method of said received packet and specifying one or more type of information contained in said received packet, refers to said packet transfer method database and replies provides, to said packet transfer equipment, one or more type of information related to the transfer method of said received packet that is determined for each of said received packet.

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

28. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 wherein:

the information <u>replied provided</u> to said packet transfer equipment as the information related to the packet transfer method contains <u>at least-one each</u> of:

the information related to rewriting of the information contained in the received packet, the information related to the information added to the received packet, the information related to the information deleted from the received packet, the information related to the control method of the route through which the received packet is transferred and the information related to the resource control method for the route through which the received packet is transferred.

29. (Currently Amended) [[A]] <u>The</u> packet transfer method resolution server as set forth in claim 24 further comprising:

a resource information collection section that collects the resource information in the \underline{a} network; and

an entry rewriting section that rewrites entries registered to said packet transfer method database based on the resource information in said network collected by said resource information collection section.

30. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 further comprising:

a resource control request section that, if the resource control for other nodes in the network is necessary, sends a request for resource control of said other nodes as the additional information of said transfer method when said packet transfer method resolution request acceptance section replies provides the information related to said transfer method in response to said packet transfer method resolution request from said packet transfer equipment.

31. (Currently Amended) [[A]] The packet transfer method resolution server as set forth in claim 24 further comprising:

a packet transfer policy description section that describes the <u>a</u> policy to control the information related to said transfer method replied by said packet transfer method resolution request acceptance section in response to said packet transfer method resolution request from said packet transfer equipment, and

an entry rewriting section that rewrites entries registered to said packet transfer method database based on said policy described in said packet transfer policy description section.

32. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having the an IP address corresponding to the a FQDN and the FQDN corresponding to the IP address registered stored therein where the FQDN or the IP address in the a packet transfer equipment that transfers the a received packet to another node uniquely indicating several types of information contained in said received packet and the FQDN or the IP address uniquely indicating one or more type of information related to the a transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts the an IP address resolution request inquiring the IP address corresponding to the FQDN from the a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and replies provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts the a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and replies provides the FQDN corresponding to said IP address to said packet transfer equipment.

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

33. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having the <u>an</u> IP address corresponding to the <u>a</u> FQDN and the FQDN corresponding to the IP address <u>registered stored therein</u> where the FQDN or the IP address in the <u>a</u> packet transfer equipment that transfers the <u>a</u> received packet to another node uniquely indicating one or more type of information in said received packet determined for each of said received packet and the FQDN or the IP address uniquely

indicating one or more type of information related to the transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts the an IP address resolution request inquiring the IP address corresponding to the FQDN from the a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and replies provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts the a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and replies provides the FQDN corresponding to said IP address to said packet transfer equipment.

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

34. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having the an IP address corresponding to the a FQDN and the FQDN corresponding to the IP address registered stored therein where the FQDN or the IP address in the a packet transfer equipment that transfers the a received packet to another node uniquely indicating one or more type of information in said received packet and the FQDN or the IP address uniquely indicating several types of information related to the transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts the an IP address resolution request inquiring the IP address corresponding to the FQDN from the packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and replies provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts the a FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and replies provides the FQDN corresponding to said IP address to said packet transfer equipment,

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

35. (Currently Amended) A DNS server comprising:

an IP address/FQDN correspondence database having the an IP address corresponding to the a FQDN and the FQDN corresponding to the IP address registered stored therein where the FQDN or the IP address in the a packet transfer equipment that transfers the a received packet to another node uniquely indicating one or more type of information in said received packet and the FQDN or the IP address uniquely indicating one or more type of information determined for each of said received packet related to the a transfer method of said received packet are associated, and

a DNS resolution request acceptance section that accepts the an IP address resolution request inquiring the IP address corresponding to the FQDN from the a packet transfer equipment that transfers the received packet to another node, refers to said IP address/FQDN correspondence database and replies provides the IP address corresponding to said FQDN to said packet transfer equipment as well as accepts replies provides FQDN resolution request inquiring the FQDN corresponding to the IP address from said packet transfer equipment, refers to said IP address/FQDN correspondence database and replies provides the FQDN corresponding to said IP address to said packet transfer equipment.

wherein said received packet is transferred to the another node in a downstream direction towards a destination node, in accordance with the transfer method.

36. (Currently Amended) [[A]] The DNS server as set forth in claim 32 wherein: the FQDN or the IP address replied by said DNS resolution request acceptance section to said packet transfer equipment uniquely indicates the information related to one or more arbitrary transfer method contained in the processing method of rewriting, addition and deletion for one or more arbitrary piece of information in said received packet and/or the route through which said received packet is transferred and the a resource control method for said route.

37. (Currently Amended) [[A]] The DNS server as set forth in claim 32 further comprising:

a resource information collection section that collects the resource information in the network; and

an entry rewriting section that rewrites entries registered to said IP address/FQDN correspondence database based on the resource information in said network collected by said resource information collection section.

38. (Currently Amended) [[A]] The DNS server as set forth in claim 32 further comprising:

a resource control request section that, if the resource control for other nodes in the a network is judged necessary, sends a request for the resource control to said other nodes when said DNS resolution request acceptance section replies provides the IP address corresponding to said FQDN and the FQDN corresponding to said IP address in response to said IP address resolution request and said FQDN resolution request from said packet transfer equipment.

39. (Currently Amended) [[A]] The DNS server as set forth in claim 32 further comprising:

a packet transfer policy description section that describes the <u>a</u> policy to control the IP address corresponding to said FQDN and the FQDN corresponding to said IP address replied by said DNS resolution request acceptance section in response to said <u>a</u> IP address resolution request and said FQDN resolution request from said packet transfer equipment, and

an entry rewriting section that rewrites entries registered to said IP address/FQDN correspondence database based on said policy described in said packet transfer policy description section.

40. - 53. (Canceled).

54. (New) The packet transfer equipment as set forth in claim 1, wherein the information related to the transfer method include a first type of information corresponding to Destination IP address information, and second type of information corresponding to destination MAC address information.